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BOOK REVIEWS

Flora of New Zealand. Lichens

Galloway, D.J. 'Flora of New Zealand. Lichens', 1985,
Government Printer, Wellington.

Although plans are well advanced towards coverage of Australian lichens in the Flora of Australia series, it will be some time yet before this is available. This volume will be of interest and usefulness to workers in southern Australia and primarily Tasmania, regions with a similar cryptogam flora to that of New Zealand. This similarity is most noticeable at generic level, but also substantial among the species. Most keys should be usable with southern Australian material, but a good treatment of Australian lichen genera is already available. (Rogers, R.W. (1981) The Genera of Australian Lichens. Univ. of Qld. Press).

This work is comprehensive, even with the proviso that the 966 taxa described possibly represent only 60% of the New Zealand lichens. As a whole it is concise and the ten years taken to assemble the daunting mass of information are easily understood. It is refreshing to find detailed information regarding the methods involved in the work's technical production, with a frank appraisal of its scientific limitations and strengths. Pages xi and xii of the Preface could be considered a model for a minimum amount of information required for readers of a flora account to assess its scientific basis.

The keys appear successful on brief inspection and are easily intelligible, making use of basic and readily-discernible characters wherever possible. Subjectively, the overall layout of the key seems poor as regards distinction of the major morphological groups of lichens. It would have saved much time and page-turning to have the major groups segregated in one place at the beginning of the key. The initial heading CRUSTOSE is also misleading, implying that one should seek another page to start identifying other groups. A useful addition is the indication in parenthesis of the previous lead which has brought one to the relevant point. It is occasionally necessary to work backwards through part of a key. The somewhat complex chemical methods which are taking an increasingly important role in professional lichenology have been kept to a minimum wherever possible, but groups like *Cladonia* tend to read like a catalogue of chemicals at times.

My most serious criticisms of this otherwise excellent work are two. Firstly illustrations, which can often save many words, are lacking. Secondly, and arguably more significant, the lack in an otherwise professional treatment of any super-generic classification beyond simple assignation of genus to family, without cross-referencing. Whilst the taxonomy of lichens will continue for some time to be unstable, even a simple conspectus of families as generally accepted would have produced a more complete taxonomic work.

Galloway, D.J. (1985). 'Flora of New Zealand. Lichens', pp. 662, with 8 colour photographs, 4 maps (endpapers). (Published by P.D. Hasselberg, Government Printer, Wellington, New Zealand). Hard-bound. NZ $39.95.

Southern Australian Liverworts

Scott, G.A.M. 'Southern Australian Liverworts', 1985,
Australian Flora and Fauna Series Number 2;
Australian Government Publishing Service, Canberra.

Similar in style to 'Mosses of Southern Australia' (Scott, G.A.M., Stone I.G. and Rosser, C. 1976), but with greater and valuable emphasis on illustrations, is this first treatment of any

substantial regional coverage of Australian hepatics. An almost complete absence of literature about these plants in Australia has frightened off many with potential interest, be they students or amateurs. This production, as with 'Mosses of Southern Australia', is an intentionally simple coverage of the hepatic flora as it is currently known and frequent mention is made of present inadequacies in the biological or taxonomic knowledge. It is intended as a starting-point, not a sophisticated or erudite work solely for the professional bryologist.

In broad terms, the region covered by the book includes most of southern Australia, although descriptions are principally based on Victorian material. The northern limits in New South Wales see the addition of subtropical species, whilst Tasmania has a richer temperate flora than Victoria. The western States have poorer hepatic floras which largely consist of species found also in Victoria.

Several general reference works on hepatics are available and methods are similar to those used with mosses, hence the Introduction deals only briefly with general information. A useful conspectus of classification follows and taxa are arranged systematically in the taxonomic sections. For those without access to other reference works, a simplified coverage of morphology and biology is included, as well as a glossary.

The keys in this book have been circulated in various draft forms among many Australian bryologists for several years, so considerable experimentation and refinement has gone into their production. This has produced a result which is as functional as is currently possible, given that much basic research is needed in several areas.

The volume features brief descriptions and an honest open-ended approach which points to problems where more work is required. This gives a much needed basis on which future studies in Australian hepatics will rest.

Scott, G.A.M. (1985). 'Southern Australian Liverworts', pp. 216, with 134 black-and-white photographs. (Published in Australian Flora and Fauna Series Number 2 by Australian Government Publishing Service, Canberra). Soft-bound. A$19.20.

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